Remarks

The present amendment responds to the Official Action dated January 12, 2005. In that Action, claims 1-10 were provisonally rejected under the judicially created doctrine of obviousnes-type double patenting over claims 1-16 of copending Application No. 10/044,535. Although Applicants respectfully disagree with the Official Action's suggestion that "the claims [between the present application and the copending application] only differ in terminology", in the interest of expediting prosecution, a terminal disclaimer to obviate the provisional double patenting rejection is being filed with this response. Authorization to charge Deposit Account No. 14-0225 the terminal disclaimer fee of $130 under 37 C.F.R. §1.20(d) accompanies this response.

Claims 1-10 also were rejected under 35 U.S.C. §102(b) based on Briechle U.S. Patent No. 5,704,049 (Briechle). This ground of rejection is addressed below following a brief discussion of the present invention to provide context.

New claim 11 has been added to cover certain aspects of the present invention. Support for claim 11 can be found, for example, at page 11, line 21 – page 12, line 10. Claims 1-11 are presently pending.

The Present Invention

The present invention advantageously provides methods and apparatus for an improved electronic shelf label (ESL) system. In one aspect, the present invention includes an ESL for displaying information relating to an item associated with the ESL. The ESL includes a plurality

of registers for storing information controlling the content and formatting of the information displayed. A host computer system includes an ESL data file comprising a data image of the ESL's registers or memory. To perform an intelligent data bedcheck of an ESL, the host computer determines the portions of the ESL's registers which are currently used to control the display of information by the ESL on the ESL's display. The host computer then calculates one or more sumchecks of the data which should be stored in the determined registers, and transmits one or more bedcheck messages including the sumchecks to the ESL. To verify its own register contents, the ESL receives each bedcheck message and compares each received sumcheck with a sumcheck calculated using the information stored in the ESL's registers which are associated with each sumcheck.

Update of Application Serial Numbers in Specification

Since filing the present application, application serial numbers have been provided for co-pending applications which were incorporated by reference. The specification at the paragraph beginning at page 3, line 19 has been amended to include these application serial numbers and to correct the listed filing date of these co-pending applications.

Grammatical Errors in the Specification

During the preparation of this response, several grammatical errors were noted and are now being corrected in the specification. Paragraphs beginning at page 4, line 21, page 6, line 10, and page 9, line 6 have been amended to correct various grammatical errors.

The Art Rejections

As addressed in greater detail below, Briechle does not support the Official Action's reading of it and the sole rejection based thereupon should be reconsidered and withdrawn. Further, the Applicant does not acquiesce in the analysis of Briechle made by the Official Action and respectfully traverses the Official Action's analysis underlying its rejection.

Claims 1-10 were rejected under 35 U.S.C. §102(b) based on Briechle. Briechle describes a subglobal addressing scheme to address more than one, but less than all of the electronic shelf labels (ESLs) controlled by a central computer. Briechle, Abstract. To this end, Briechle's scheme includes associated groups of ESLs with a common characteristic such as a geographic location in a vertical bay or data stored in the ESLs such as a promotional code. Briechle, col. 3, lines 19-50. Using subglobal addressing, Briechle's scheme reduces the occurrence of channel interference caused when two or more labels respond at the same time. Briechle, col. 13, lines 63-66. However, Briechle does not address the problem of limiting the messages or a message's content to intelligently bedcheck a particular ESL as claimed.

In contrast to Briechle, the present invention addresses the problem of performing an intelligent bedcheck of an ESL. To perform an intelligent bedcheck, one aspect of the present invention verifies a subset of registers in an ESL that is currently being used to control the display of information at the ESL. To this end, the present invention includes providing an ESL data file stored in a host computer system which contains the intended contents of the ESLs registers. The host computer system determines the subset of registers which are being utilized. The present invention then only verifies the contents found in the determined subset of registers.

This advantageous approach reduces the amount of information that is sent from the host computer to the ESL and reduces the calculations performed at the ESL. See Specification, page 11, lines 15-18. Claim 1 reads as follows:

> A method of performing an intelligent bedcheck of an electronic shelf label (ESL) comprising the steps of:
> (a) displaying informational text by the ESL, said ESL including a plurality of registers;
> (b) providing an ESL data file stored in a host computer system comprising the intended contents of said plurality of registers;
> (c) determining by the host computer system a subset of said plurality of registers containing both said informational text and data controlling the display of said informational text; and
> (d) verifying that the intended contents of said subset of the registers matches the actual contents of said subset of registers. (emphasis added)

Briechle does not disclose and does not make obvious "determining by the host computer system a subset of said plurality of registers containing both said informational text and data controlling the display of said informational text," as claimed in claim 1. Furthermore, Briechle does not disclose and does not make obvious "verifying that the intended contents of said subset of the registers matches the actual contents of said subset of registers," as claimed in claim 1. See also claim 6. Briechle's system appears to merely perform bedchecks on the entire ESL itself, if at all, without regards to determining a subset of active registers. See Briechle, col. 3, lines 59-60.

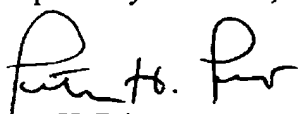
The Official Action relies on Briechle at col. 13, line 54 – col. 16, line 65 as suggesting the determining and verifying steps of claim 1. Nowhere in that cited portion of text does Briechle disclose or make obvious an "ESL data file" comprising the "intended contents" of a plurality of registers, the step of determining "a subset of said plurality of registers containing

both said informational text and data controlling the display of said informational text" and the step of "verifying that the intended contents of said subset of the registers matches the actual contents of said subset of registers," as claimed in claim 1. It should be noted that the Official Action fails to apply Briechle to the features as claimed in claims 2-9. Should the rejection be maintained, we request clarification of the grounds for rejection so we can better focus our response to those claims.

Conclusion

All of the presently pending claims, as amended, appearing to define over the applied references, withdrawal of the present rejection and prompt allowance are requested.

Respectfully submitted,



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